-continued

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- 1. A method for treating cancer, the method comprising the steps of: (a) administering an anti-cancer therapeutic to a patient, (b) contacting a sample obtained from the patient with an anti-kidney associated antigen 1 (KAAG1) antibody or antigen binding fragment thereof, (c) detecting a complex formed by the antibody or antigen binding fragment thereof and a KAAG1- or KAAG1-variant expressing cell, and (d) administering a further anti-cancer therapeutic.
- 2. The method of claim 1, wherein the anti-cancer therapeutic of step (d) is an anti-KAAG1 antibody or an antigen binding fragment thereof.
- 3. The method of claim 1, wherein the anti-KAAG1 antibody or antigen binding fragment thereof of step (b) is a monoclonal antibody, a chimeric antibody, a hybrid antibody, a humanized antibody or a human antibody or an antigen binding fragment thereof.
- 4. The method of claim 1, wherein the anti-KAAG1 antibody or antigen binding fragment thereof of step (b) comprises a heavy chain variable region comprising the CDRH1 amino acid sequence set forth in SEQ ID NO.:5, the CDRH2 amino acid sequence set forth in SEQ ID NO.:6 or in SEQ ID NO:56 and the CDRH3 amino acid sequence set forth in SEQ ID NO:7 and a light chain variable region comprising the CDRL1 amino acid sequence set forth in SEQ ID NO:8, the CDRL2 amino acid sequence set forth in SEQ ID NO:9 and the CDRL3 amino acid sequence set forth in SEQ ID NO:9 and the CDRL3 amino acid sequence set forth in SEQ ID NO:10.
- **5**. The method of claim **1**, wherein the anti-KAAG1 antibody or antigen binding fragment thereof of step (b) comprises:
 - a. a heavy chain variable region having the amino acid sequence set forth in SEQ ID NO.:41 and a light chain variable region having the amino acid sequence set forth in SEQ ID NO.:33;
 - b. a heavy chain having the amino acid sequence set forth in SEQ ID NO.:49 and a light chain having the amino acid sequence set forth in SEQ ID NO.:43;
 - c. a heavy chain variable region having the amino acid sequence set forth in SEQ ID NO.:38 and a light chain variable region having the amino acid sequence set forth in SEQ ID NO.:33;

- d. a heavy chain having the amino acid sequence set forth in SEQ ID NO.:46 and a light chain having the amino acid sequence set forth in SEQ ID NO.:43;
- e. a heavy chain variable region having the amino acid sequence set forth in SEQ ID NO.:39 and a light chain variable region having the amino acid sequence set forth in SEQ ID NO.:33;
- f. a heavy chain having the amino acid sequence set forth in SEQ ID NO.:47 and a light chain having the amino acid sequence set forth in SEQ ID NO.:43;
- g. a heavy chain variable region having the amino acid sequence set forth in SEQ ID NO.:40 and a light chain variable region having the amino acid sequence set forth in SEQ ID NO.:33;
- h. a heavy chain having the amino acid sequence set forth in SEQ ID NO.:48 and a light chain having the amino acid sequence set forth SEQ ID NO.:43;
- a heavy chain variable region having the amino acid sequence set forth in SEQ ID NO.:41 and a light chain variable region having the amino acid sequence set forth in SEQ ID NO.:34;
- j. a heavy chain having the amino acid sequence set forth in SEQ ID NO.:49 and a light chain having the amino acid sequence set forth in SEQ ID NO.:44;
- k. a heavy chain variable region having the amino acid sequence set forth in SEQ ID NO.:38 and a light chain variable region having the amino acid sequence set forth in SEQ ID NO.:34;
- a heavy chain having the amino acid sequence set forth in SEQ ID NO.:46 and a light chain having the amino acid sequence set forth in SEQ ID NO.:44;
- m. a heavy chain variable region having the amino acid sequence set forth in SEQ ID NO.:39 and a light chain variable region having the amino acid sequence set forth in SEO ID NO.:34;
- n. a heavy chain having the amino acid sequence set forth in SEQ ID NO.:47 and a light chain having the amino acid sequence set forth in SEQ ID NO.:44;
- a heavy chain variable region having the amino acid sequence set forth in SEQ ID NO.:40 and a light chain variable region having the amino acid sequence set forth in SEQ ID NO.:34;